IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF OREGON

PORTLAND DIVISION

MENTOR GRAPHICS CORPORATION,

        Plaintiff,

    v.

EVE-USA, INC., et al.,

        Defendants.

No. 3:10-cv-00954-MO

OPINION AND ORDER

MOSMAN, J.,

Plaintiff, Mentor Graphics Corp., brings this lawsuit alleging that defendants, EVE-USA, Inc. and Emulation and Verification Engineering, S.A., are infringing claims 1–8 of its assigned United States Patent Number 6,876,962 ("'962"). After reviewing plaintiff's opening claim construction brief [151], defendants' opening brief [173], and both parties' responses [186] [187], I conducted a *Markman* Hearing [233] on June 11, 2012.

Instead of reiterating my analysis with regard to the terms discussed in length at the *Markman* Hearing, I have merely provided my construction as stated on the record and refer the parties to the transcript of the proceedings in support. (*See Markman* Hearing Tran. [238]). The remainder of this Opinion addresses defendants' argument that claim terms 1(b), 4(b), 7(3-5), and 8(3-5) are subject to 35 U.S.C. § 112, ¶ 6 ("§ 112, ¶ 6"), as well as my reasoning in support

of my construction of the claim term "configuration resources." Also, I note that the parties were able to resolve their dispute concerning the claim term "netlist" by Joint Stipulation [242]. With that said, I construe the disputed claim terms, phrases, and clauses identified in '962 for claim construction by the parties as follows.

CLAIM CONSTRUCTION

Term	Construction
"reconfigurable emulation resources"	Reconfigurable hardware used for emulation.
"circuit design(s)"	A design for an integrated circuit.
"configuration information"	Information that is transmitted to and used to configure reconfigurable emulation resources.
"emulation"/"emulating"	Reproducing the operation of a circuit design through steps including mapping the circuit design into hardware.
"emulator"	A system capable of reproducing the operation of a circuit design through steps including mapping the circuit design into hardware.
"netlist"	A list of logic and memory elements and their inputs, outputs, and interconnects.

DISCUSSION

1. 35 U.S.C. § 112, ¶ 6

Defendants argue that '962 claims 1(b), 4(b), 7(3-5), and 8(3-5) are subject to § 112, ¶ 6.[1] Specifically, defendants assert that claims 1(b) and 4(b) are means-plus-function claims and that claims 7(3-5) and 8(3-5) are step-plus-function claims. Defendants argue that because these claims are subject to § 112, ¶ 6, they are invalid for indefiniteness, because the '962 patent specification does not describe a structure that corresponds to the claimed function in claims 1(b) and 4(b), and because claims 7(3-5) and 8(3-5) do not recite how the claimed functions are accomplished.

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[1] 35 U.S.C. § 112, ¶ 6, states: "An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof."

a. Means-Plus-Function

§ 112, ¶ 6 applies "only to purely functional limitations that do not provide the structure

that performs the recited function." *Phillips v. AWH Corp.,* 415 F.3d 1303, 1311 (Fed. Cir.

2005). The question of "[w]hether certain claim language invokes § 112, ¶ 6 is an exercise in

claim construction." *Inventio AG v. ThyssenKrupp Elevator Americas Corp.*, 649 F.3d 1350,

1356 (Fed. Cir. 2011). "The use of the term 'means' triggers a rebuttable presumption that § 112,

¶ 6 governs the construction of the claim term." *Id*. (citing *TriMed, Inc. v. Stryker Corp*., 514

F.3d 1256, 1259 (Fed. Cir. 2008)). On the other hand, there is a presumption that the limitation

"does not invoke § 112, ¶ 6" if the claim language does not recite the term "means." *Id*. The

"presumption flowing from the absence of the term 'means' is a strong one that is not readily

overcome." *Id*. Because '962 claims 1(b) and 4(b) do not recite the term "means," there is a

strong presumption that § 112, ¶ 6 does not apply in this case

Defendants can overcome the presumption if they demonstrate that "the claim term fails

to 'recite sufficiently definite structure' or else recites a 'function without reciting sufficient

structure for performing that function.'" *CCS Fitness, Inc. v. Brunswick Corp*., 288 F.3d 1359,

1369 (Fed. Cir. 2002) (quoting *Watts v. XL Sys., Inc*., 232 F.3d 877, 880 (Fed. Cir. 2000)).

Claims 1(b) and 4(b) recite the term "computer," which defendants assert is a generic term that

the written description fails to clearly limit structurally. Plaintiff argues that '962 claims 1(b) and

4(b) provide sufficient structure: a specially configured computer. Defendants advance two

arguments in support of their attempt to overcome the presumption. First, they argue that this

case is easily distinguishable from *Inventio*, in which the Federal Circuit held that the term

"computing unit" connoted sufficiently definite structure to those of skill in the art. *See Inventio*

AG, 649 F.3d at 1359–60. Second, they assert that "computer" cannot connote sufficiently

definite structure to those of skill in the art, because the language that plaintiff asserts provides

structure is the same language that makes '962 novel.

First, I disagree that the term "computer" as used in '962 is more structurally devoid than

the term "computing unit" in *Inventio* such that this case is distinguishable. '962 claims 1(b) and

4(b) recites that the "computer" is "configured to generate configuration information." '962

explains that the computer is configured with a program that generates the configuration

information, which are the bits that go into the field programmable gate arrays ("FPGA")

contained in the emulator. The '962 specification elaborates that while the way in which the

information is programmed into the FPGAs is unique, the information is still generated in the

same way such that one in the art would reasonably understand the computer's role in the

process. Defendants' second argument, that novelty alone subjects these claims to § 112, ¶ 6,

fails for this reason. The term "computer" coupled with the described program, therefore,

connotes sufficiently definite structure to those of skill in the art under Federal Circuit law.

For all of these reasons, I find that defendants failed to overcome their heavy burden of

showing that term "computer" as used in '962 claims 1(b) and 4(b) is so structurally devoid that

the claims should be rewritten in means-plus-function format. Accordingly, I find that § 112, ¶ 6

does not apply to claims 1(b) and 4(b).

b. Step-Plus-Function

Defendants' argument here—that '962 claims 7(3-5) and 8(3-5) are step-plus-function

claims because they describe a function sans the identification of corresponding acts within the

patent's specification—is rarely viable as "[o]nly a few cases have found the existence of a step-

plus-function claim element." *Seal-Flex, Inc. v. Athletic Track and Court Const.*, 172 F.3d 836,

850 n.5 (Fed. Cir. 1999). "[A] claim element deserves step-plus-function treatment when

'expressed as a . . . step for performing a specified function without the recital of . . . *acts* in support thereof." *Id.* at 848 (quoting *O.I. Corp. v. Tekmar Co.,* 115 F.3d 1576, 1583 (Fed. Cir. 1997). Again, the "phrase 'step for' in a method claim raises a presumption that § 112, ¶ 6 applies." *Id*. at 849. Conversely, the "absence of the phrase 'step for' from the language of a claim tends to show that the claim element is not in step-plus-function form." *Id*. '962 claims 7(3-5) and 8(3-5), despite the fact they do not include express step-plus-function language, "may nevertheless fall within § 112, ¶ 6 if they merely claim the underlying function without recitation of acts for performing that function." *Id*.

Defendants argue that the relevant '962 claim language does not explain how netlists are generated, or how the subset of reconfigurable emulation resources allocated to the first circuit design is to be considered in generating the second netlist. Generally, "the 'underlying function' of a method claim element corresponds to what that element ultimately accomplishes in relationship to what the other elements of the claim and the claim as a whole accomplish," whereas "'[a]cts' . . . correspond to *how* the function is accomplished." *Id*. at 849–50. Given that "method claim elements often recite phrases susceptible to interpretation as either a function or as an act for performing a function," *id*. at 849, defendants' argument has some persuasive value. However, if this court "were to construe every process claim containing steps described by an 'ing' verb, we would be limiting process claims in a manner never intended by Congress." *O.I. Corp.,* 115 F.3d at 1583. I have reviewed the contested language in '962 claims 7(3-5) and 8(3-5) and find that they are not subject to § 112, ¶ 6 because the specification sufficiently identifies acts for performing the claimed function.

2. "Configuration Information"

The parties agree that the '962 claim term "configuration information" itself did not have a plain and ordinary meaning at the time of the effective filing date. The parties disagree as to whether one can derive the term's meaning from the claim language or whether a person of ordinary skill in the art would have to turn to the specification to understand the term's meaning. The Federal Circuit holds that when a phrase has no accepted meaning to one of ordinary skill in the art, it should be construed "only as broadly as is provided for by the patent itself." *Goldenberg v. Cytogen, Inc.*, 373 F.3d 1158, 1164 (Fed. Cir. 2004).

Defendants raise several arguments in support of their proposed construction. I rejected their first argument at the *Markman* Hearing, that the prosecution history limits this claim term, and continue to do so today. I also reject their argument that one reasonably skilled in the art would not understand the term "configuration information" merely because of its novelty for the same reasons that I rejected the argument with regard to the means-plus-function analysis. Independent of these reasons, defendants argue that because "configuration information" has no specific meaning, it must be defined by looking to the '962 specification, which necessarily requires looking to '962 Figure 4. Because Figure 4 is merely an example, or "one embodiment of a collection of tables for tracking usage status of the emulation resources," (*see* Chen Decl. [171] Ex. 1, 14), the figure itself is insufficient support for the argument that the phrase at issue should be limited by a definition holding that configuration information must be generated from the information set forth in Figure 4.

The remaining issue is whether to define "configuration information" broadly as plaintiff suggests, or narrowly, as defendants maintain. Defendants assert that "configuration information" cannot be construed separately from '962 claim elements 1(b), 4(b), 7(3–4), and

8(3–4) because of the context of the phrase. I disagree. The phrase "configuration information" is

used 16 times in '962, including eight times in the claims themselves, six times in the

specification, and one time in both the one-paragraph abstract and the summary of invention.

When reading the phrase in this context, '962 supports the broader definition advanced by

plaintiff, considering the number of times the phrase is used in the specification, and the fact the

specification consistently makes clear that its purpose is to configure emulation hardware, which

is a step removed from the generation of netlists based on the netlist and interconnection

generator that stores the information displayed in Figure 4. Accordingly, I adopt plaintiff's

proposed definition as stated on the above claim construction chart.

CONCLUSION

The Court construes the following '962 claim terms as stated herein: "reconfigurable

emulation resources"; "circuit design(s)"; "configuration information"; "emulation"/"emulating";

"emulator"; and "netlist."

IT IS SO ORDERED.

DATED this __10th__ day of August, 2012.

                                                        /s/ Michael W. Mosman_____
                                                        MICHAEL W. MOSMAN
                                                        United States District Court